

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/027432A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04N7/36

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 606 675 A (IBM) 20 July 1994 (1994-07-20) column 6, line 26 - line 58	1,3,4, 12,41
Y		2,5, 42-44
A		6-11, 13-18, 43-46

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

- "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

3 December 2004

Date of mailing of the International search report

04 04 2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	"TEXT OF FINAL COMMITTEE DRAFT OF JOINT VIDEO SPECIFICATION (ITU-T REC. H.264 / ISO/IEC 14496-10 AVC)" INTERNATIONAL ORGANIZATION FOR STANDARDIZATION - ORGANISATION INTERNATIONALE DE NORMALISATION, XX, XX, July 2002 (2002-07), pages I-XV,1, XP001100641	2
A	paragraph '7.4.2.2!' paragraph '7.3.3!' -----	1, 3-5, 7-18, 45, 46
Y	WO 02/15585 A (NOKIA MOBILE PHONES LTD ; LAINEMA JANI (US)) 21 February 2002 (2002-02-21)	5, 42-44
A	abstract page 9, line 1 - line 8 page 11, line 31 - page 12, line 9 -----	1-4, 6-18, 41, 45, 46
A	US 2001/046265 A1 (ASSAF NADINE) 29 November 2001 (2001-11-29) paragraph '0028!; claim 1 -----	1-18, 41-46
A	SMOLIC A ET AL: "LONG-TERM GLOBAL MOTION ESTIMATION AND ITS APPLICATION FOR SPRITE CODING, CONTENT DESCRIPTION, AND SEGMENTATION" IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY, IEEE INC. NEW YORK, US, vol. 9, no. 8, December 1999 (1999-12), pages 1227-1242, XP000873447 ISSN: 1051-8215 paragraph '0III!' -----	1-18, 41-46
A	TOURAPIS A M ET AL: "DIRECT MODE CODING FOR BI-PREDICTIVE PICTURES IN THE JVT STANDARD" ISCAS 2003. PROCEEDINGS OF THE 2003 IEEE INTERNATIONAL SYMPOSIUM ON CIRCUITS AND SYSTEMS. BANGKOK, THAILAND, MAY 25 - 28, 2003, IEEE INTERNATIONAL SYMPOSIUM ON CIRCUITS AND SYSTEMS, NEW YORK, NY : IEEE, US, vol. VOL. 2 OF 5, 25 May 2003 (2003-05-25), pages II-700, XP001189209 ISBN: 0-7803-7761-3 paragraph '0002!' -----	1-18, 41-46

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>"ITU-T Recommendation H.263 - Video Coding for Low Bit Rate Communication" ITU-T DRAFT RECOMMENDATION H.263, XX, XX, February 1998 (1998-02), page 33,86,98, XP002199785 paragraphs 'ON.2!', 'VIDEO!', 'SOURCE!', 'CODING!', 'ALGORITHM!'; figure N.1 paragraph 'N.4.1.4 TEMPORAL REFERENCE FOR PREDICTION!</p> <p>-----</p> <p>YI J LIANG ET AL: "Low-latency video transmission over lossy packet networks using rate-distortion optimized reference picture selection" PROCEEDINGS 2002 INTERNATIONAL CONFERENCE ON IMAGE PROCESSING. ICIP 2002. ROCHESTER, NY, SEPT. 22 - 25, 2002, INTERNATIONAL CONFERENCE ON IMAGE PROCESSING, NEW YORK, NY : IEEE, US, vol. VOL. 2 OF 3, 22 September 2002 (2002-09-22), pages 181-184, XP010607938 ISBN: 0-7803-7622-6 paragraph '0003!'</p> <p>-----</p>	1-18, 41-46
A		1-18, 41-46

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-18, 41-46

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-18, 41-46

Method of inter-coding video signal using a list of references by selecting the first reference listed in the list as the only reference.

2. claims: 19-26, 28-32

Method of inter-coding video signal using at least one reference listed in a list of active references by removing references from the list.

3. claims: 27, 47-50

Method of inter-coding video using at least one reference listed in a list of active references by reordering the listed references.

4. claims: 33-40

Method of video encoding by using a plurality of permutations of available references.

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Information on patent family members

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0606675	A	20-07-1994	EP JP	0606675 A2 7154803 A		20-07-1994 16-06-1995
WO 0215585	A	21-02-2002	WO AU BR CA EE EP HU JP MX	0215585 A1 6447200 A 0017304 A 2419988 A1 200300053 A 1325635 A1 0302895 A2 2004534411 T PA03001270 A		21-02-2002 25-02-2002 08-07-2003 21-02-2002 15-12-2004 09-07-2003 29-12-2003 11-11-2004 09-06-2003
US 2001046265	A1	29-11-2001	FR CN EP JP	2809572 A1 1327345 A 1161101 A1 2002027485 A		30-11-2001 19-12-2001 05-12-2001 25-01-2002

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